



United States
Department of
Agriculture

Forest
Service NA

Reply to: 3460/3410

Date: August 4, 1992

Subject: Forest Pest Damage, Ground and Aerial Survey,
Hoosier National Forest

To: Forest Supervisor
Wayne-Hoosier National Forest

On Friday May 29, 1992 John Omer, FHP, Morgantown, WV, examined several areas of pine on the Tell City Ranger District of the Hoosier National Forest. These areas include short leaf and virginia pine. Several of these stands have high mortality levels with surrounding trees showing advance signs of decline and stress.

The areas of mortality and die back are located in Perry County on the Derby, 7.5 minute series quadraugle. The first site there after referred to as site A, contains mostly shortleaf pine, and is located on the north half of sections 23 and 24, and on the south half of sections 13 and 14. The site, site B, contains shortleaf and virginia pine, and is located on the southwest of section 9 and the southeast of section 10. Both sites are generally infested with Ips calligraphus, the six-spined engraver. These beetles attack the lower portion of the trunk of most species of pine. These sites also have Dipteran larva (true flies) and beetles from the family Nitidulidae (fungus feeders). There are also some fungal infestations present. Site A also had a population of Pissodes nemorensis, deodar weevil or northern pine weevil present. These weevils feed on and lay eggs in standing trees that are in a weakened or dying condition. They also use freshly cut stumps and blown-down trees. If weevil populations are high, they may attack and kill healthy trees.

Site B has a population of longhorned beetles of the Cerambycidae family, genus Monochamus. These beetles prefer freshly cut, felled, dying or recently dead trees.

The exact cause of this outbreak of insects and decline of the trees is difficult to determine. Several factors which may have contributed, either singularly or in combination are: 1. short leaf is out of its natural range in Indiana; 2. it prefers sandy soils while most of these sites are predominantly clay soils; 3. the trees are reaching maturity; 4. some stands are over crowded and there has been several recent years of drought.

These factors have weakened the trees and made them susceptible to insect and fungal attack.

These sites will continue to decline as the insects and fungus spread through them. The recommended control method is sanitation-salvage cutting. If the entire stand is not cut or there are pine trees close to the area, the slash should be removed or destroyed. Burning the slash is an effective method of controlling many Ips species after a cutting. Slash can also be buried or the bark can be peeled and buried if the fire danger is high.



John Omer conducted an aerial survey of the Hoosier National Forest on June 23rd and 24th. The general decline of pine seems confined mostly to short leaf and red pine. The enclosed maps shows the areas of decline, including some areas of oak and beech mortality and decline. Ground checking has been limited to the Tell City Ranger District. He hopes to cover more area later this year.

If you have any questions about the information contained in this letter, please contact John Omer at 304-285-1544 or J.Omer:S24L08A.



PETER A. RUSH
Field Representative
Forest Health Protection

Enclosures

cc: Tom Thake
Ranger Districts
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JRO/ct